GRID DEPLOYMENT OFFICE

FACT SHEET

GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S. Department of Energy's Grid Deployment Office is administering a historic $10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

SMART GRID FOR SMART DECARBONIZATION

PPL subsidiary Rhode Island Energy will deploy an integrated suite of information technology (IT) and operational technology (OT) smart grid investments that will provide the requisite capability, visibility, and control grid operators need to manage complex two-way power flows. The highly granular data coming from the project in communication-enabled equipment via the fiberoptic communications backbone is ingested and analyzed by advanced distribution system management software (ADMS) and advanced energy management software (AEMS), which returns optimized directives to the OT devices. The centralized asset hub data system and geographic information system (GIS), which represent a digital twin of the grid, provide supporting business and planning optimization complementary to ADMS and AEMS.

Anticipated Outcomes and Benefits

This project, along with concurrent investments in Rhode Island Energy's electric grid, is anticipated to improve service and demonstrate how a smart grid can enable smart decarbonization at scale safely, reliably, and affordably. These benefits include:

- An anticipated increase in available load and hosting capacities for strategic electrification and distributed renewable generation.
- Anticipated 30% improvement in reliability including critical customer facilities and community lifelines.
- Decreased restoration times, resulting in fewer customers being out of power for extended periods of time, allowing for a faster economic and quality of life recovery.
- Increased capacity of transmission facilities or the capability of the transmission system to reliably transfer increased amounts of electric energy.
- Forty percent of overall benefits of certain federal investments flow to **disadvantaged communities** (DACs), which could lead to 300-400 US jobs across the value chain.
- Direct reduction in customer costs.
- Approximately 90% of labor associated with the investments performed by unionized workers.
- Commitment to pay not less than the prevailing wages to all laborers and mechanics, contractors, and subcontractors.
- Commitment to supplier diversity and to identify Minority Business Enterprises, minority-owned businesses, woman-owned businesses, and veteran-owned businesses to solicit as vendors, contractors, and subcontractors.
- Commitment to identify and partner with workforce training organizations serving underrepresented individuals and those facing barriers to quality employment, such as individuals with disabilities, returning citizens, youth in **disadvantaged communities**, and veterans.

PROJECT DETAILS

- **Project:** Smart Grid for Decarbonization: Deploying advanced technology to meet clean energy mandates
- **Applicant/Selectee:** Rhode Island Energy
- **GRIP Program:** Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- **Federal cost share:** $50,000,000
- **Recipient cost share:** $235,047,477
- **Project Location:** Rhode Island
- **Project type:** Visibility and Control

HELPFUL LINKS

- Grid Resilience and Innovation Partnerships Program
- About the Grid Deployment Office

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